

The Work Limitations Questionnaire (WLQ-25)

Description

The Work Limitations Questionnaire (WLQ-25) was developed by Lerner and colleagues (Lerner et al 2001). It is one of the most commonly used questionnaires to evaluate at-work disability and productivity loss. It contains 25 items arranged under four subscales addressing four dimensions of job demands namely: time demands, physical demands, mental/interpersonal demands, and output demands. The time demands subscale contains five items on punctuality, pacing, and productivity. The physical demands subscale has six items covering static positioning, moving around, lifting, repetitive movements, posture, and use of tools. The mental or interpersonal demands subscale contains nine items that assess concentration and on-the-job social interactions. The output demands subscale contains five items determining the volume and quality of work (Lerner et al 2001).

Instructions to client and scoring: For each of the questions the clients are asked to rate their level of difficulty in handling job specific demands in the past two weeks in view of their current health status. Of the four sub scales, except for the physical demands subscale, the clients are asked how much of time they experience difficulty. The physical demands subscale inquires into how much of the time they are able to do items without difficulty. A five point ordinal response scale ranging from zero-four with an additional sixth option 'does not apply to my job' is used. The total scores range from 0 – 100 % and an index score

can also be obtained (Lerner et al, 2001). Productivity loss can be evaluated using an algorithm provided by the developers in their manual.

Clinical measurement properties: A systematic review of the psychometric properties of the WLQ-25 revealed that the scales have been assessed in various populations and have demonstrated acceptable levels of validity, reliability and responsiveness. (William et al 2007). The WLQ-25 has demonstrated low to moderate correlation with other pain and disability measures ($r = 0.28$ to 0.67) with the physical demand subscale showing the lowest correlation (Roy et al 2011). In a study involving 836 patients with rheumatoid arthritis, Walker and colleagues found the WLQ-25 to correlate moderately with pain, quality of life and fatigue. ($r = 0.46$ to 0.60) (Walker et al 2005). The internal consistency of the subscales ranges from 0.77 to 0.97 (Lerner et al 2002, Walker et al 2005; Beaton et al 2010). Test-retest validity ranges from 0.69-0.80 for the four sub scales (Lerner 2001). An exploratory factor analysis revealed one main factor explaining around 77% of the variance (Walker et al 2005).

The WLQ-25 has been shown to be sensitive to change with a standardized responsive mean of 0.65 for the summed score and 0.63 for the index score. The clinically important difference for the WLQ has been reported as 13/100 points for the summed score, 5/28.6 points for the index score (Roy et al 2011).

Commentary

At-work disability is a vital construct that is of interest for rehabilitation professionals, employers and policy makers. It is responsible for a major loss in productivity resulting in a huge but not obviously seen economic burden to society. WLQ-25 is one of the most commonly used tools for accessing this construct. Further evaluation of the WLQ-25 using modern clinical measurement methods would enhance its validity. Moreover the different versions of the WLQ-25 have to be compared to prescribe a standard version for use by clinicians.

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